

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/011171

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B21B37/28

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B21B G01B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 197 58 466 A (BETR FORSCH INST ANGEW FORSCH ; KRUPP HOESCH STAHL AG (DE); GOM GES FU) 15 October 1998 (1998-10-15) column 3, line 20 - column 4, line 3; claims 1,2; figures 1,2	1,2,7-16
Y	EP 1 055 905 A (IMS MESSSYSTEME GMBH) 29 November 2000 (2000-11-29) column 1, paragraph 2 column 2, paragraph 11 - column 3, paragraph 19; figure 6	3-6,17, 18
Y	US 4 752 695 A (PIRLET ROBERT) 21 June 1988 (1988-06-21) column 3, line 26 - line 46	3,4,6,18
Y		5,17
		-/-



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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- *A* document defining the general state of the art which is not considered to be of particular relevance
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the International filing date but later than the priority date claimed

T later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

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Date of the actual completion of the International search

12 January 2005

Date of mailing of the international search report

19/01/2005

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 21 04 886 A (SCHLOEMANN AG) 24 August 1972 (1972-08-24) claims 1-3,6; figures 1,2 -----	1,2,7-16
Y		3-6,17, 18

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/011171

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
DE 19758466	A	15-10-1998	DE	19709992 C1	01-10-1998
			DE	19758466 A1	15-10-1998
			EP	1418400 A2	12-05-2004
			EP	0864847 A2	16-09-1998
			JP	11002511 A	06-01-1999
			US	2001012388 A1	09-08-2001
			US	6286349 B1	11-09-2001
EP 1055905	A	29-11-2000	DE	19947572 A1	21-12-2000
			AT	270424 T	15-07-2004
			DE	50006932 D1	05-08-2004
			EP	1055905 A2	29-11-2000
			JP	3486152 B2	13-01-2004
			JP	2001004350 A	12-01-2001
			US	6480802 B1	12-11-2002
US 4752695	A	21-06-1988	BE	902359 A1	06-11-1985
			AT	66066 T	15-08-1991
			CA	1255093 A1	06-06-1989
			EP	0201475 A2	12-11-1986
			JP	1928392 C	12-05-1995
			JP	6058217 B	03-08-1994
			JP	61281912 A	12-12-1986
DE 2104886	A	24-08-1972	DE	2104886 A1	24-08-1972